

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application. The following listing provides the amended claims with the amendments marked with deleted material in crossed out and new material underlined to show the changes made.

5 Listing of Claims:

1. (Currently Amended) An integrated-circuit ("IC") layout comprising:

_____ a) _____ a first set of vias that are in shape of a non-quadrilateral polygon; and

_____ b) _____ a first set of interconnect lines that have ends that terminate on at least a
plurality of the first set of vias, wherein a plurality of the interconnect line ends are in shape of
10 half of the non-quadrilateral polygon.

2. (Original) The IC layout of claim 1, wherein the polygon is an octagon.

3. (Original) The IC layout of claim 2, wherein the octagon has eight equal sides.

4. (Original) The IC layout of claim 2 further comprising a second set of vias
that have a diamond shape.

15 5. (Original) The IC layout of claim 4 further comprising a third set of vias that
have a rectangular shape.

6. (Original) The IC layout of claim 1, wherein the polygon is a hexagon.

7. (Original) The IC layout of claim 6, wherein the hexagon has six equal sides.

8. (Currently Amended) An integrated-circuit ("IC") layout comprising:

_____ a) _____ a first set of vias, wherein each via in the first set traverses at least two layers and has one contact on each of the layers, wherein at least one of the contacts of each via in the first set is in shape of a non-quadrilateral polygon;

_____ b) _____ a first set of interconnect lines that have ends that terminate on the non-
5 quadrilateral contacts of at least a plurality of the first set of vias, wherein a plurality of the interconnect line ends are in shape of half of the non-quadrilateral polygon.

9. (Original) The IC layout of claim 8, wherein the polygon is an octagon.

10. (Original) The IC layout of claim 9 further comprising a second set of vias, wherein each via in the second set traverses at least two layers and has one contact on each of the
10 layers, wherein at least one of the contacts has a diamond shape.

11. (Original) The IC layout of claim 10 further comprising a third set of vias, wherein each via in the third set traverses at least two layers and has one contact on each of the layers, wherein at least one of the contacts is in shape of a rectangle.

12. (Original) The IC layout of claim 11, wherein the length and width of the
15 rectangle are different.

13. (Original) The IC layout of claim 11, wherein the rectangle is a square with equal length and width.

14. (Original) The IC layout of claim 8, wherein the polygon is a hexagon.

15. (Original) The IC layout of claim 8, wherein each contact of each via is in
20 shape of a non-quadrilateral polygon.

16. (New) The IC layout of claim 8, wherein the interconnect line ends are in the shape of a half-octagon.

17. (New) The IC layout of claim 8, wherein the interconnect line ends are in the shape of a half-hexagon.

5 18. (New) The IC layout of claim 8, wherein the interconnect lines with half polygonal ends terminate on the diamond shaped contacts.